CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

- 1-9. (Canceled)
- 10. (Currently amended) A <u>diagnostic assay comprising</u> method to diagnose an oral or systemic pathology, disease or disorder in a subject, wherein the disease is a cancer of the oral eavity and/or of oropharynx, the method comprising:

providing a saliva supernatant from <u>a the</u> subject, <u>wherein the saliva supernatant is derived from</u> <u>a saliva sample from the subject, wherein the saliva sample is separated into a cellular phase and a supernatant, wherein the supernatant is the saliva supernatant;</u>

detecting in the saliva supernatant an mRNA profile of a gene associated with the pathology, disease or disorder, wherein the gene is selected from the group consisting of the gene coding for IL8, DUSP1, H3F3A, OAZ1, S100P, IL1b and SAT; and

comparing the mRNA profile of the gene with a predetermined human mRNA profile of the gene, wherein the predetermined human mRNA profile is the mRNA profile from a human without known oropharyngeal squamous cell carcinoma (OSCC) and wherein a statistically significant increase in mRNA expression of the gene coding for IL8, DUSP1, H3F3A, OAZ1, S100P, IL1b or SAT in the mRNA profile relative to the predetermined human mRNA profile is indicative of a disease; and based thereon

affecting a treatment the predetermined human mRNA profile of the gene being indicative of the presence of the pathology, disease or disorder in the subject.

- 11. (Canceled)
- 12. (Original) The method of claim 10, wherein the disease is a cancer of the oral cavity and/or oropharynx and the gene is the gene coding for IL8.

- 13. (Original) The method of claim 12, wherein the disease is oropharyngeal squamous cell carcinoma or head and neck squamous cell carcinoma.
- 14.-27. (Canceled)
- 28. (Currently amended) The <u>diagnostic assay method</u> of claim 10, wherein detecting an mRNA profile is performed by microarray assay, high density oligonucleotide microarray assay, quantitative PCR or RT-PCR.
- 29. (New) The diagnostic assay of claim 10, wherein a statistically significant increase in mRNA expression is at least a 2-fold increase in mRNA expression of the gene coding for IL8, DUSP1, H3F3A, OAZ1, S100P, IL1b and SAT.
- 30. (New) The diagnostic assay of claim 10, wherein the treatment is a treatment for a cancer of the oral cavity and/or oropharynx.
- 31. (New) The diagnostic assay of claim 10, wherein the treatment is a treatment for OSCC or head and neck squamous cell carcinoma.
- 32. (New) The diagnostic assay of claim 10, wherein the treatment is selected from the group consisting of: chemotherapy, radiation, surgery and alternative remedies.

33. (New) A diagnostic assay comprising:

providing a saliva supernatant from a subject, wherein the saliva supernatant is derived from a saliva sample from the subject, wherein the saliva sample is separated into a cellular phase and a supernatant, wherein the supernatant is the saliva supernatant;

detecting in the saliva supernatant mRNA transcripts from each of the following genes: IL8, OAZ1, IL1b and SAT

comparing mRNA expression of IL8, OAZ1, IL1b and SAT detected in the saliva supernatant from a subject with mRNA expression of IL8, OAZ1, IL1b and SAT from a human without known oropharyngeal squamous cell carcinoma (OSCC); and based thereon effecting a treatment.

34. (New) A diagnostic assay comprising:

providing a saliva supernatant from a subject, wherein the saliva supernatant is derived from a saliva sample from the subject, wherein the saliva sample is separated into a cellular phase and a supernatant, wherein the supernatant is the saliva supernatant;

detecting in the saliva supernatant an mRNA profile of a gene, wherein the gene is selected from the group consisting of the gene coding for IL8, DUSP1, H3F3A, OAZ1, S100P, IL1b and SAT; comparing the mRNA profile of the gene with a predetermined human mRNA profile of the gene, wherein the predetermined human mRNA profile is the mRNA profile from a human without known oropharyngeal squamous cell carcinoma (OSCC) and wherein a statistically significant increase in mRNA expression of the gene coding for IL8, DUSP1, H3F3A, OAZ1, S100P, IL1b or SAT in the mRNA profile relative to the predetermined human mRNA profile is indicative of OSCC; and based thereon effecting a treatment